

Massachusetts Department of Environmental Protection Source Water Assessment and Protection (SWAP) Report for

Tewksbury Hospital

What is SWAP?

The Source Water Assessment and Protection (SWAP) program, established under the federal Safe Drinking Water Act, requires every state to:

- inventory land uses within the recharge areas of all public water supply sources;
- assess the suscepti bility of drinking water sources to contamination from these land uses; and
- publicize the results to provide support for improved protection.

Susceptibility and Water Quality

Susceptibility is a measure of a water supply's potential to become contaminated due to land uses and activities within its recharge area.

A source's susceptibility to contamination does *not* imply poor water quality.

Water suppliers protect drinking water by monitoring for more than 100 chemicals, disinfecting, filtering, or treating water supplies, and using source protection measures to ensure that safe water is delivered to the tap.

Actual water quality is best reflected by the results of regular water tests. To learn more about your water quality, refer to your water supplier's annual Consumer Confidence Reports.

Table 1: Public Water System Information

PWS Name	Tewksbury Hospital			
PWS Address	365 East Street			
City/Town	Tewksbury, Massachusetts 01876			
PWS ID Number	3295001			
Local Contact	William Kelleher			
Phone Number	(978) 851-7321			

Introduction

We are all concerned about the quality of the water we drink. Drinking water wells may be threatened by many potential contaminant sources, including storm runoff, road salting, and improper disposal of hazardous materials. Citizens and local officials can work together to better protect these drinking water sources.

Purpose of this report:

This report is a planning tool to support local and state efforts to improve water supply protection. By identifying land uses within water supply protection areas that may be potential sources of contamination, the assessment helps focus protection efforts on appropriate Best Management Practices (BMPs) and drinking water source protection measures.

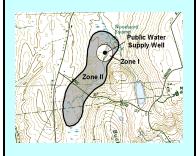
Refer to Table 3 for Recommendations to address potential sources of contamination. Department of Environmental Protection (DEP) staff are available to provide information about funding and other resources that may be available to your community.

This report includes the following sections:

- 1. Description of the Water System
- 2. Land Uses within Protection Areas
- 3. Source Water Protection Conclusions and Recommendations
- 4. Appendices

What is a Protection Area?

A well's water supply protection area is the land around the well where protection activities should be focused. Each well has a Zone I protective radius and a Zone II protection area.



Glossary

Aquifer: An underground waterbearing layer of permeable material that will yield water in a usable quantity to a well.

Hydrogeologic Barrier: An underground layer of impermeable material (i.e. clay) that resists penetration by water.

IWPA: A 400-foot to ½ mile radius around a public water supply well proportional to its pumping rate; the area DEP recommends for protection in the absence of a defined Zone II. To determine I WPA radius, refer to the attached map.

Recharge Area: The surface area that contributes water to a well.

Zone 1: The area closest to a well; a 100 to 400 foot radius proportional to the well's pumping rate. This area should be owned or controlled by the water supplier and limited to water supply activities.

Zone II: The primary recharge area for the aquifer. This area is defined by hydrogeologic studies that must be approved by DEP. Refer to the attached map to determine the land within your Zone II.

Section 1: Description of the Water System

Zone II #: 497	Susceptibility: High	
Well Names	Source IDs	
Old Tubular Wells	3295001-01G	
East & Maple Street Well	3295001-03G	

Tewksbury Hospital maintains and operates two public water supply sources. Tewksbury Hospital's sources are located within the Shawsheen River basin. The Old Tubular Wells (01G) and East & Maple Street Well (03G) wellhead protection area is located within the towns of Tewksbury and Andover. The East & Maple Street Well as a Zone I radius of 400 feet; tubular wells, such as the Old Tubular Wells, have a Zone I radius of 250 feet around each well. The wells are located in an aquifer with a high vulnerability to contamination due to the absence of a hydrogeologic barrier (i.e. confining clay layer) that can prevent contaminant migration. Please refer to the attached map of the Zone II.

For current information on monitoring results and treatment, please contact the Public Water System contact person listed above in Table 1 for a copy of the most recent Consumer Confidence Report. Drinking water monitoring reporting data are also available on the web at http://www.epa.gov/safewater/ccr1.html.

Section 2: Land Uses in the Protection Areas

The Zone II for Tewksbury Hospital's wells is primarily a mixture of forest and residential land uses, with a portions consisting of agricultural, commercial, and industrial activities (refer to attached map for details). Land uses and activities that are potential sources of contamination are listed in Table 2, with further detail provided in the Table of Regulated Facilities and Table of Underground Storage Tanks in Appendix B.

Key Land Uses and Protection Issues include:

- 1. Activities in Zone I
- 2. Hazardous Materials Storage and Use
- 3. Agricultural Activities
- 4. Residential Land Uses
- 5. Transportation Corridors
- 6. Oil or Hazardous Material Contamination Sites
- 7. Comprehensive Wellhead Protection Planning

The overall ranking of susceptibility to contamination for the Tewksbury Hospital wells is high, based on the presence of at least one high threat land use within the water supply protection area, as seen in Table 2.

1. Activities in Zone Is – Massachusetts drinking water regulations (310 CMR 22.00) require public water suppliers to own the Zone I, or control the Zone I through a conservation restriction. Only water supply activities are allowed in the Zone I. However, many public water supplies were developed prior to the Department's regulations and can contain non-water supply activities such as homes and public roads. The Zone I for Tewksbury Hospital's Old Tubular Wells is intersected by active railroad tracks; the East & Maple Street Well is intersected by East Street.

Zone I Recommendations:

- To the extent possible, remove all nonwater supply activities from the Zone Is to comply with DEP's Zone I requirements.
- ✓ Use BMPs for the storage, use, and disposal of hazardous materials such as water supply chemicals and maintenance chemicals.
- ✓ Do not use or store pesticides, fertilizers or road salt within the Zone I.
- ✓ Keep any new non-water supply activities out of the Zone I.
- ✓ Work with local officials during their review of the railroad right of way Yearly Operating Plans to ensure that water supplies are protected during vegetation control.
- 2. Hazardous Materials Storage and Use A small percent of the land area within the Zone II contains commercial and industrial land uses. Many small businesses and industries use hazardous materials, produce hazardous waste products, and/or store large quantities of hazardous materials in UST/AST. If hazardous materials are improperly stored, used, or disposed, they become potential sources of contamination. Hazardous materials should never be disposed of to a septic system or floor drain leading directly to the ground.

When you fertilize the lawn, Remember you're not just fertilizing the lawn.



It's hard to imagine that a green, flourishing lawn could pose a threat to the environment, but the fertilizers you apply to your lawn are potential pollutants! If applied improperly or in excess, fertilizer can be washed off your properly and end up in lakes and streams. This causes algae to grow, which uses up oxygen that fish need to survive. So if you fertilize, please follow directions and use



Hazardous Materials Storage and Use Recommendations:

Work with the Town of Tewksbury to:

- Educate local businesses on best management practices for protecting water supplies. Distribute the fact sheet "Businesses Protect Drinking Water" available in Appendix A and on www.mass.gov/dep/brp/dws/protect.htm, which provides BMPs for common business issues.
- ✓ Work with local businesses to register those facilities that are unregistered generators of hazardous waste or waste oil. Partnerships between businesses, water suppliers, and communities enhance successful public drinking water protection practices.
- ✓ Educate local businesses on Massachusetts floor drain requirements. See brochure "Industrial Floor Drains" for more information.
- 3. Agricultural Activities Pesticides and fertilizers have the potential to contaminate a drinking water source if improperly stored, applied, or disposed. If not contained or applied properly, animal waste from barnyards, manure pits and field application is a potential source of contamination to ground and surface water. If managed improperly, underground and aboveground storage tanks (USTs and ASTs) can be potential sources of contamination due to leaks or spills.

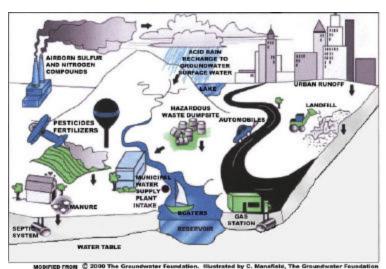


Figure 1: Sample watershed with examples of potential sources of contami-

Agricultural Recommendations:

- Work with farmers to make them aware of the water supply and to encourage the use of a U.S. Natural Resources Conservation Service (NRCS) farm plan to protect water supplies.
- ✓ The Massachusetts Department of Food & Agriculture's booklet titled "On-Farm Strategies to Protect Water Quality An Assessment & Planning Tool for Best Management Practices" (December 1996) describes technical and financial assistance programs related to the control of erosion and to the management of nutrients, pests, manure, grazing and irrigation.
- ✓ Work with farmers to ensure that pesticides, fertilizers and manure are being stored within a structure designed to prevent runoff.
- **4. Residential Land Uses** Residential areas are common throughout the Zone II. Some of the areas have public sewers, and some use septic systems. If managed improperly, activities associated with residential areas can contribute to drinking water contamination. Common potential sources of contamination include:
- Septic Systems Improper disposal of household hazardous chemicals to septic

When you wash your car in the driveway, <u>Remember</u> you're not just washing your car in the driveway.



All the soap, seum, and oily grit runs along the curb. Then into a storm drain and directly into our lakes, rivers, and streams. And that causes pollution which is unbealthy for everyone. So how do you avoid this whole mess? Easy! Wash your car on the grass or gravel instead of the street. Or better yet, take it to a car wash where the water gets treated or recycled.

The Massachusetts Department of Environmental Protection One Water Street Boston, Ma. 02108.

systems is a potential source of contamination to the groundwater because septic systems lead to the ground. If septic systems fail or are not properly maintained they can be a potential source of microbial contamination.

- Household Hazardous Materials Hazardous materials may include automotive wastes, paints, solvents, pesticides, fertilizers, and other substances. Improper use, storage, and disposal of chemical products used in homes are potential sources of contamination.
- Heating Oil Storage If managed improperly, Underground and Aboveground Storage Tanks (UST and AST) can be potential sources of contamination due to leaks or spills of the fuel oil they store.
- Stormwater Catch basins transport stormwater from roadways and adjacent properties to the ground. As flowing stormwater travels, it picks up debris and contaminants from streets and lawns. Common potential contaminants include lawn chemicals, pet waste, and contaminants from automotive leaks, maintenance, washing, or accidents.

Residential Land Use Recommendations:

✓ Educate residents on best management practices (BMPs) for protecting water supplies. Distribute the fact sheet

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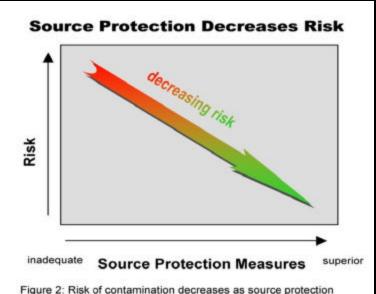


Figure 2: Risk of contamination decreases as source protection increases. This is true for public water systems of any susceptibility ranking, whether High, Moderate, or Low.

Potential Source of Contamination vs. Actual Contamination

The activities listed in Table 2 are those that typically use, produce, or store contaminants of concern, which, <u>if managed improperly</u>, are potential sources of contamination (PSC).

It is important to understand that a release may never occur from the potential source of contamination provided facilities are using best management practices (BMPs). If BMPs are in place, the actual risk may be lower than the threat ranking identified in Table 2. Many potential sources of contamination are regulated at the federal, state and/or local levels, to further reduce the risk.

Table 2: Land Use in the Protection Areas (IWPA and Zones II)

For more information, refer to Appendix B: Regulated Facilities within the Water Supply Protection Area

Activities	Quantity	Threat	Potential Source of Contamination		
Agricultural					
Fertilizer Storage or Use	Few	M	Leaks, spills, improper handling, or over-application of fertilizers		
Landscaping	1	M	Leaks, spills, improper handling, or over-application of fertilizers and pesticides		
Manure Storage or Spreading	Few	Н	Improper handling of manure (microbial contaminants)		
Commercial					
Gas Stations	1	Н	Spills, leaks, or improper handling or storage of automotive fluids and fuels		
Service Stations/ Auto Repair Shops	2	Н	Spills, leaks, or improper handling of automotive fluids, and solvents		
Cemeteries	2	M	Leaks, spills, improper handling, or over-application of pesticides; historic embalming fluids		
Funeral Homes	2	L	Spills, leaks, or improper handling of hazardous chemicals		
Junk Yards and Salvage Yards	1	Н	Spills, leaks, or improper handling of automotive chemicals, wastes, and batteries		
Laundromats	1	L	Improper management of wash water		
Railroad Tracks and Yards	1	Н	Over-application or improper handling of herbicides, leaks or spills of transported chemicals and maintenance chemicals; fuel storage		
Industrial					
Electronics/Electrical Manufacturers	1	Н	Spills, leaks, or improper handling or storage of chemicals an process wastes		
Fuel Oil Distributors	2	Н	Spills, leaks, or improper handling or storage of fuel oil		
Residential					
Fuel Oil Storage (at residences)	100+	М	Spills, leaks, or improper handling of fuel oil		
Lawn Care / Gardening	100+	M	Over-application or improper storage and disposal of pesticides		
Septic Systems/ Cesspools	100+	М	Microbial contaminants, and improper disposal of hazardous chemicals		

Activities	Quantity	Threat	Potential Source of Contamination		
Miscellaneous					
Aquatic Wildlife	Numerous	L	Microbial contaminants		
Clandestine (illegal) Dumping	Few	Н	Debris containing hazardous materials or wastes		
Landfills and Dumps	1	Н	Seepage of leachate		
Large Quantity Hazardous Waste Generators	1	Н	Spills, leaks, or improper handling or storage of hazardous materials and waste		
Oil or Hazardous Material Sites	11		Tier Classified Oil or Hazardous Materials Sites are not ranked due to their site-specific character. Individual sites are identified in Appendix B.		
Schools, Colleges, and Universities	2	M	Spills, leaks, or improper handling or storage of fuel oil, laboratory, art, photographic, machine shop, and other chemicals		
Small Quantity Hazardous Waste Generators	1	M	Spills, leaks, or improper handling or storage of hazardous materials and waste		
Stormwater Drains	Numerous	L	Debris, pet waste, and chemicals in stormwater from roads, parking lots, and lawns		
Transmission Line Rights-of-Way	2	L	Construction and corridor maintenance, over-application or improper handling of herbicides		
Transportation Corridors	2	M	Accidental leaks or spills of fuels and other hazardous materials, over-application or improper handling of pesticides		
Underground Storage Tanks	15	Н	Spills, leaks, or improper handling of stored materials		
Utility Substation Transformers	1	L	Spills, leaks, or improper handling of chemicals and other materials including PCBs		
Very Small Quantity Hazardous Waste Generators	3	L	Spills, leaks, or improper handling or storage of hazardous materials and waste		
Waste Transfer/ Recycling Stations	1	M	Improper management, seepage, and runoff of water contacti waste materials		
Wastewater Treatment Plant/Collection Facility/ Lagoon	1	M	Improper handling or storage of treatment chemicals or equipment maintenance materials; improper management of wastewater		

Notes:

- 1. When specific potential contaminants are not known, typical potential contaminants or activities for that type of land use are listed. Facilities within the watershed may not contain all of these potential contaminant sources, may contain other potential contaminant sources, or may use Best Management Practices to prevent contaminants from reaching drinking water supplies.
- 2. For more information on regulated facilities, refer to Appendix B: Regulated Facilities within the Water Supply Protection Area information about these potential sources of contamination.
- 3. For information about Oil or Hazardous Materials Sites in your protection areas, refer to Appendix C: Tier Classified Oil and/or Hazardous Material Sites.
- * THREAT RANKING The rankings (high, moderate or low) represent the relative threat of each land use compared to other PSCs. The ranking of a particular PSC is based on a number of factors, including: the type and quantity of chemicals typically used or generated by the PSC; the characteristics of the contaminants (such as toxicity, environmental fate and transport); and the behavior and mobility of the pollutants in soils and groundwater.

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- "Residents Protect Drinking Water" available in Appendix A and on www. mass.gov/dep/brp/dws/protect.htm, which provides BMPs for common residential issues.
- ✓ Work with planners to control new residential developments in the water supply protection areas.
- ✓ Promote BMPs for stormwater management and pollution controls.
- **5. Transportation Corridors** Transportation corridors and other paved and unpaved local roads cross through the water supply protection area. Spills from vehicular accidents are a major concern. In addition, roadway construction, maintenance, and typical highway use can all be potential sources of contamination.

What are "BMPs?"

Best Management Practices (BMPs) are measures that are used to protect and improve surface water and groundwater quality. BMPs can be <u>structural</u>, such as oil & grease trap catch basins, <u>nonstructural</u>, such as hazardous waste collection days or <u>managerial</u>, such as employee training on proper disposal procedures.

Accidents can lead to spills of gasoline and other potentially dangerous transported chemicals. Roadways are frequent sites for illegal dumping of hazardous or other potentially harmful wastes. De-icing salt, automotive chemicals and other debris on roads are picked up by stormwater and wash into catch basins.

Transportation Corridor Recommendations:

Work with the Town of Tewksbury to:

- ✓ Ensure that, wherever possible, drains discharge stormwater outside of the Zone I.
- ✓ Identify stormwater drainage systems along transportation corridors. If maps aren't yet available, work with town officials to investigate mapping options such as the upcoming Phase II Stormwater Rule requiring some communities to complete stormwater mapping.
- ✓ Work with local emergency response teams to ensure that any spills within the Zone II can be effectively contained. Review storm drainage maps with emergency response teams.
- ✓ Work with the Town and State to best manage stormwater in the Zone II. Best management practices include street sweeping, vegetative swales, and regular catch basin inspection, cleaning and maintenance.
- **6. Presence of Oil or Hazardous Material Contamination Sites** The Zone II contains DEP Tier Classified Oil and/or Hazardous Material Release Sites indicated on the map as Release Tracking Numbers 3-0002104, 3-0014152, 3-0001482, 3-0014315, 3-0001865, 3-0002797, and 3-0020216. Refer to the attached map and Appendix C for more information.

Oil or Hazardous Material Contamination Sites Recommendation:

- ✓ Monitor progress on any ongoing remedial action conducted for the known oil or contamination sites.
- **7. Protection Planning** The Town of Tewksbury, at the request of Tewksbury Hospital, passed a groundwater protection bylaw that meets DEP's Groundwater Protection regulations 310 CMR 22.21. Protection planning protects drinking water by managing the land area that supplies water to a well. A Wellhead Protection Plan coordinates community efforts, identifies protection strategies, establishes a timeframe for implementation, and provides a forum for public participation. There are resources available to help communities develop a plan for protecting drinking water supply wells.

Protection Planning Recommendations:

- ✓ Coordinate efforts with the Town of Andover to include Tewksbury Hospital's source protection area in local land use controls. For more information on DEP land use controls see http://mass.gov /dep/brp/dws/protect.htm.
- ✓ If local controls do not regulate floor drains, be sure to include floor drain controls that meet 310 CMR 22.21(2).
- ✓ Work with town boards to review and provide recommendations on proposed development within your water supply protection areas. To obtain information on build-out analyses for the town, see the Executive Office of Environmental Affairs' community preservation web site, http://commpres.env.state.ma.us/.

What is a Zone III?

A Zone III (the secondary recharge area) is the land beyond the Zone II from which surface and ground water drain to the Zone II and is often coincident with a watershed boundary.

The Zone III is defined as a secondary recharge area for one or both of the following reasons:

- The low permeability of underground water bearing materials in this area significantly reduces the rate of groundwater and potential contaminant flow into the Zone II.
- 2. The groundwater in this area discharges to a surface water feature such as a river, rather than discharging directly into the aquifer.

The land uses within the Zone III are assessed only for sources that are shown to be groundwater under the direct influence of surface water.

Other land uses and activities within the Zone II are included in Table 2. Refer to Table 2 and Appendix 2 for more information about these land uses.

Identifying potential sources of contamination is an important initial step in protecting your drinking water sources. Further local investigation will provide more in-depth information and may identify new land uses and activities that are potential sources of contamination. Once potential sources of contamination are identified, specific recommendations like those below should be used to better protect your water supply.

Section 3: Source Water Protection Conclusions and Recommendations

Current Land Uses and Source Protection:

As with many water supply protection areas, Tewksbury Hospital's Zone II contains potential sources of contamination. However, source protection measures reduce the risk of actual contamination, as illustrated in Figure 2.

Tewksbury Hospital is commended for taking an active role in promoting source protection measures in the Water Supply Protection Areas through:

- Working with the Town of Tewksbury to adopt a zoning bylaw that restricts land uses in the Zone II in accordance with DEP regulations
- Removing agricultural activities from the Zone I of both wells, and for monitoring and controlling these activities in the Zone II
- Pursuing ownership or control of land within the Zone I of both wells

Source Protection Recommendations:

To better protect the sources for the future:

- ✓ Inspect the Zone I regularly, and when £asible, remove any non-water supply activities.
- ✓ Educate residents on ways they can help you to protect drinking water sources.
- ✓ Work with emergency response teams to ensure that they are aware of the stormwater drainage in your Zone II and to cooperate on responding to spills or accidents.
- ✓ Partner with local businesses to ensure the proper storage, handling, and disposal of hazardous materials.

Conclusions:

These recommendations are only part of your ongoing local drinking water source protection. Additional source protection recommendations are listed in Table 3, the Key Issues above, and Appendix A.

DEP staff, informational documents, and resources are available to help you build on this SWAP report as you continue to improve drinking water protection in your community. Grants and loans are available through the Drinking Water State Revolving Loan Fund, the Clean Water State Revolving Fund, and other sources. For more information on grants and loans, visit the Bureau of Resource Protection's Municipal Services web site at: http://mass.gov/dep/brp/mf/mfpubs. htm.

The assessment and protection recommendations in this SWAP report are provided as a tool to encourage community discussion, support ongoing source protection efforts, and help set local drinking water protection priorities. Citizens and community officials should use this SWAP report to spur discussion of local drinking water protection measures. The water supplier should supplement this SWAP report with local information on potential sources of contamination and land uses. Local information should be maintained and updated periodically to

Benefits of Source Protection

Source Protection helps protect public health and is also good for fiscal fitness:

- Protects drinking water quality at the source
- Reduces monitoring costs through the DEP Waiver Program
- Treatment can be reduced or avoided entirely, saving treatment costs
- Prevents costly contamination clean-up
- Preventing contamination saves costs on water purchases, and expensive new source development

Contact your regional DEP office for more information on Source Protection and the Waiver Program.

Top 5 Reasons to Develop a Local Wellhead Protection Plan

- Reduces Risk to Human Health
- **②** Cost Effective! Reduces or Eliminates Costs Associated With:
- I ncreased groundwater monitoring and treatment
- Water supply clean up and remediation
- Replacing a water supply
- Purchasing water
- Supports municipal bylaws, making them less likely to be challenged
- Ensures clean drinking water supplies for future generations
- **9** Enhances real estate values clean drinking water is a local amenity. A community known for its great drinking water in a place people want to live and businesses want to locate.

Table 3: Current Protection and Recommendations

Protection Measures	Status	Recommendations		
Zone I				
Does the Public Water Supplier (PWS) own or control the entire Zone I?	NO	To the extent possible, remove prohibited activities in Zone A to comply with DEP's Zone A requirements. Investigate options for gaining ownership or control of the Zone A.		
Are the Zone Is posted with "Public Drinking Water Supply" Signs?	YES	Additional economical signs are available from the Northeast Rural Water Association (802) 660-4988.		
Are the Zone Is regularly inspected?	YES	Continue daily inspections of drinking water protection areas.		
Are water supply-related activities the only activities within the Zone I?	NO	Monitor prohibited activities in Zone I, and investigate options for removing these activities.		
Municipal Controls (Zoning Bylaws, Health	Regulations, and Ge	eneral Bylaws)		
Does the municipality have Wellhead Protection Controls that meet 310 CMR 22.21(2)? YES		The Town of Tewksbury passed a bylaw that meets DEP's requirements for wellhead protection. Refer to www.state.ma.us/dep/brp/dws/ for model bylaws and health regulations, and current regulations.		
Do neighboring communities protect the water supply protection areas extending into their communities?	NO	Work with the Town of Andover to encourage them to adopt local controls that include Tewksbury Hospital's wellhead protection area.		
Planning				
Does the PWS have a wellhead protection plan?	NO	Develop and implement a wellhead protection plan. Follow "Developing a Local Wellhead Protection Plan" available at: www.state.ma.us/dep/brp/dws/.		
Does the PWS have a formal "Emergency Response Plan" to deal with spills or other emergencies?		Supplement plan by developing a joint emergency response plan with fire department, Board of Health, and local and state emergency officials. Coordinate emergency response drills with local teams.		
Does the municipality have a wellhead protection committee?	N/A			
Does the Board of Health conduct inspections of commercial and industrial activities?	Some	For more guidance see "Hazardous Materials Management: A Community's Guide" at www. state.ma.us/dep/brp/dws/files/hazmat.doc		
Does the PWS provide watershed protection education?	Some	Work with the Town of Tewksbury to increase residential outreach through bill stuffers, school programs, Drinking Water Week activities, and coordination with local groups. Aim additional efforts at commercial uses within the Zone II.		

reflect land use changes in the Zone II. Use this information to set priorities, target inspections, focus education efforts, and to develop a long-term drinking water source protection plan.

Section 4: Appendices

- A. Protection Recommendations
- B. Regulated Facilities within the Water Supply Protection Area
- C. Table of Tier Classified Oil and/or Hazardous Material Sites within the Water Supply Protection Areas
- D. Additional Documents on Source Protection

Additional Documents:

To help with source protection efforts, more information is available by request or online at mass.gov/dep/brp/dws including:

- 1. Water Supply Protection Guidance Materials such as model regulations, Best Management Practice information, and general water supply protection information.
- 2. MA DEP SWAP Strategy
- 3. Land Use Pollution Potential Matrix
- 4. DraftLand/Associated Contaminants Matrix

For More Information

Contact Anita Wolovick in DEP's Wilmington Office at (978) 661-7768 for more information and assistance on improving current protection measures.

Copies of this report have been provided to the public water supplier, board of health, and the town.

APPENDIX A: DEP PERMITTED FACILITIES WITHIN TEWKSBURY HOSPITAL'S WATER SUPPLY PROTECTION AREA

DEP FACILITY NUMBER	FACILITY NAME	FACILITY NAME STREET ADDRESS TOWN PERMITTED ACT		PERMITTED ACTIVITY	TY ACTIVITY CLASS	
368835	HEWLETT PACKARD CORP	165 DASCOMB RD	ANDOVER	PLANT	AIR QUALITY PERMIT	
333216	ALLSCAPE LANDSCAPING CORP	94 PINNACLE RD	TEWKSBURY	HANDLR	VERY SMALL QUANTITY GENERATOR OF HAZ WASTE	
367815	EXXONMOBIL OIL CORP	1040 MAIN ST	TEWKSBURY	HANDLR	VERY SMALL QUANTITY GENERATOR OF HAZ WASTE	
126534	GETTY 30629	869 MAIN ST	TEWKSBURY	FULDSP	FUEL DISPENSER	
308087	INTELLIGENT BIOCIDES	200 AMES POND DR	TEWKSBURY	PLANT	AIR QUALITY PERMIT	
329832	J&S SUNOCO	1049 MAIN ST	TEWKSBURY	HANDLR	SMALL QUANTITY GENERATOR OF WASTE OIL OR PCBS	
30144	MASSACHUSETTS ELECTRIC COMPANY	DOCK ST	TEWKSBURY	FULDSP	FUEL DISPENSER	
310929	NEW ENGLAND METAL RECYCLING LLC	860 EAST ST	TEWKSBURY	HANDLR	VERY SMALL QUANTITY GENERATOR OF WASTE OIL OR PCBS	
131103	TEWKSBURY HOSPITAL	365 EAST ST	TEWKSBURY	FULDSP	FUEL DISPENSER	
338417	TEWKSBURY SEWER SERVICE	95 HELVETIA ST	TEWKSBURY	DISCH	MWRA SEWER CONNECTION	

UNDERGROUND STORAGE TANKS WITHIN TEWKSBURY HOSPITAL'S WATER SUPPLY PROTECTION AREA

FACILITY NAME	ADDRESS	TOWN	DESCRIPTION	CAPACITY (GAL)	CONTENTS
GETTY STATION #30629	869 MAIN ST	TEWKSBURY	GAS STATION	6000	GASOLINE
GETTY STATION #30629	869 MAIN ST	TEWKSBURY	GAS STATION	6000	GASOLINE
GETTY STATION #30629	869 MAIN ST	TEWKSBURY	GAS STATION	6000	GASOLINE
GETTY STATION #30629	869 MAIN ST	TEWKSBURY	GAS STATION	6000	GASOLINE
J & S AUTO SERVICE CENTER INC	1049 MAIN ST	TEWKSBURY	GAS STATION	6000	GASOLINE
J & S AUTO SERVICE CENTER INC	1049 MAIN ST	TEWKSBURY	GAS STATION	6000	GASOLINE
J & S AUTO SERVICE CENTER INC	1049 MAIN ST	TEWKSBURY	GAS STATION	6000	GASOLINE
J & S AUTO SERVICE CENTER INC	1049 MAIN ST	TEWKSBURY	GAS STATION	500	WASTE OIL
KRISTINA REALTY TRUST	1220 MAIN ST	TEWKSBURY	GAS STATION	12000	GASOLINE
KRISTINA REALTY TRUST	1220 MAIN ST	TEWKSBURY	GAS STATION	12000	GASOLINE
MOBIL R/S #11681	1040 MAIN ST	TEWKSBURY	GAS STATION	10000	GASOLINE
MOBIL R/S #11681	1040 MAIN ST	TEWKSBURY	GAS STATION	10000	GASOLINE
MOBIL R/S #11681	1040 MAIN ST	TEWKSBURY	GAS STATION	1000	WASTE OIL
MOBIL R/S #11681	1040 MAIN ST	TEWKSBURY	GAS STATION		1000
VERIZON MASSACHUSETTS 524706	6 ROBINSON AVE	TEWKSBURY	UTILITIES	600	DIESEL

For more information on underground storage tanks, visit the Massachusetts Department of Fire Services web site: http://www.state.ma.us/dfs/ust/ustHome.htm
Note: This appendix includes only those facilities within the water supply protection area(s) that meet state reporting requirements and report to the appropriate agencies.
Additional facilities located within the water supply protection area(s) should be considered in local drinking water source protection planning.